

INTERNATIONAL SEARCH REPORT

International Application No

PCT/03/02776

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H01L41/24 C04B35/491

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 H01L C04B B32B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

PAJ, EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 012, no. 320 (E-651), 30 August 1988 (1988-08-30) -& JP 63 084175 A (TOYOTA MOTOR CORP), 14 April 1988 (1988-04-14) abstract page 360, left-hand column, paragraph 4; figures 1B,2 ---	1-9, 11-14
Y	page 360, left-hand column, paragraph 4; figures 1B,2 ---	10
X	EP 0 426 466 A (SAKAI CHEMICAL INDUSTRY CO) 8 May 1991 (1991-05-08) page 2, line 14-23	1-6,8-14
Y	page 3, line 52 -page 4, line 27 page 6, line 29 -page 7, line 12 ---	10
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Date of the actual completion of the international search

17 February 2004

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24/02/2004

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 395 117 B1 (TAKEUCHI YUKIHISA ET AL) 28 May 2002 (2002-05-28) column 2, line 54 -column 3, line 39 column 7, line 37 -column 8, line 37 column 9, line 37-42 column 10, line 52-62 ---	1,2,8,9, 11-14
X	PATENT ABSTRACTS OF JAPAN vol. 006, no. 200 (E-135), 9 October 1982 (1982-10-09) -& JP 57 107086 A (MATSUSHITA ELECTRIC IND CO LTD), 3 July 1982 (1982-07-03) abstract ---	1,2,8,9, 11-14
X	EP 0 813 254 A (NGK INSULATORS LTD) 17 December 1997 (1997-12-17) figure 4; example 9 ---	1-4, 11-14
X	US 5 089 070 A (MCANDREW THOMAS P) 18 February 1992 (1992-02-18) claims 1-11 ---	1,2,8, 11-14
X	EP 0 736 915 A (SEIKO EPSON CORP) 9 October 1996 (1996-10-09) page 2, line 7-46 claims 6-8 ---	1,2,4-6, 8,9,11, 13,14

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP 03/02776

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
JP 63084175	A 14-04-1988	NONE		
EP 0426466	A 08-05-1991	JP 2518703 B2 JP 3148186 A DE 69022535 D1 DE 69022535 T2 EP 0426466 A1 US 5507898 A		31-07-1996 24-06-1991 26-10-1995 21-03-1996 08-05-1991 16-04-1996
US 6395117	B1 28-05-2002	US 6051171 A DE 69903297 D1 DE 69903297 T2 EP 1088802 A1 JP 2001106579 A DE 69516479 D1 DE 69516479 T2 EP 0708068 A1 JP 3274330 B2 JP 9118568 A US 5753160 A DE 69814592 D1 EP 0959056 A1 JP 11322446 A		18-04-2000 07-11-2002 11-09-2003 04-04-2001 17-04-2001 31-05-2000 30-11-2000 24-04-1996 15-04-2002 06-05-1997 19-05-1998 18-06-2003 24-11-1999 24-11-1999
JP 57107086	A 03-07-1982	NONE		
EP 0813254	A 17-12-1997	CN 1176499 A , B DE 69707359 D1 DE 69707359 T2 EP 0813254 A1 JP 10117024 A US 6045642 A		18-03-1998 22-11-2001 27-06-2002 17-12-1997 06-05-1998 04-04-2000
US 5089070	A 18-02-1992	NONE		
EP 0736915	A 09-10-1996	EP 0736915 A1 JP 3487068 B2 JP 9223831 A US 6140746 A		09-10-1996 13-01-2004 26-08-1997 31-10-2000